

### **REMARKS**

This is a full and timely response to the outstanding final Office Action mailed November 12, 2003. Upon entry of the amendments in this response, claims 1-6, 8-12, and 14-31 remain pending. By this response Applicant amends claims 1, 11, 30, and 31. Reconsideration and allowance of the application and presently pending claims are respectfully requested. Applicant submits that the present amendments do not raise any new issues and will not require additional searching by the Examiner. Moreover, Applicant respectfully requests that the amendment be entered because the amendment places the claims in condition for allowance or reduces issues for appeal.

#### **Amendment to the Claims**

Independent claims 1, 11, 30, and 31 are amended to recite "a fiber adhesion promoter." Basis for this amendment is found throughout the specification as filed, for example, on page 13, line 7, and page 19, Example 6. Therefore, Applicant submits that no new matter is introduced by these claim amendments.

#### **Rejections under 35 U.S.C. § 103(a)**

Claims 1-31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Fink* in view of *Sperk, Jr.* (U.S. Patent No. 5,258,445) because it would allegedly have been obvious to one of ordinary skill in the art to modify the teachings of *Fink* with the teachings of *Sperk* to include fibers having a length of 0.5 inches to improve the strength and flexibility of the obtained thermoplastic. Applicant respectfully traverses this rejection because the combination of *Fink* and *Sperk* does not result in the claimed subject matter as presently amended.

The United States Patent and Trademark Office (USPTO) has the burden of showing a prima facie case of obviousness. *In re Bell*, 991 F.2d 781, 783 (Fed. Cir. 1993). In determining

obviousness, the invention must be considered as a whole, and the claims must be considered in their entirety. *Medtronic, Inc. v. Cardiac Pacemakers, Inc.*, 721 F.2d 1563, 1567 (Fed. Cir. 1983). A prima facie case of obviousness is established when the teachings from the prior art itself would have suggested the claimed subject matter to a person of ordinary skill in the art. *In re Rhinehart*, 531 F.2d 1048, 1051 (CCPA 1976). More specifically, the requirements for establishing a prima facie case of obviousness include: (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; (2) there must be a reasonable expectation of success; and (3) the prior art reference (or references when combined) must teach or suggest all the claim limitations.

When a rejection depends on a combination of prior art references, the USPTO must show that there is some teaching, suggestion, or motivation to combine the references. *In re Geiger*, 815 F.2d 686, 688 (Fed. Cir. 1987). The mere fact that the prior art could be modified would not have made the modification obvious unless the prior art suggested the desirability of the modification. *In re Gordon*, 733 F.2d 900, 902 (Fed. Cir. 1984). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaack*, 947 F.2d 488 (Fed. Cir. 1991). Finally, obviousness may not be established using hindsight. *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1551 (Fed. Cir. 1983).

Applicant notes that the presently amended independent claims are generally directed to compositions and methods of producing compositions having recycled thermoplastic, a fiber adhesion promoter and high-modulus reinforcing fibers having a length of at least approximately 0.5 inches. Applicant respectfully submits that none of the cited references either alone or in

combination teach or suggest the claimed subject matter for at least the reason that none of the cited references teach or suggest a thermoplastic composition including a fiber adhesion promoter and high-modulus reinforcing fibers having a length of at least approximately 0.5 inches.

The Office Action cites *Fink* as teaching a method for recycling synthetic carpet through an extruder to force molten polymer through the die and extruding the polymer into a desired shape. The Office Action concedes that *Fink* does not teach or suggest recycled thermoplastic compositions contain reinforcing fibers of at least 0.5 inches. Additionally, *Fink* does not teach or suggest a thermoplastic composition including a fiber adhesion promoter. *Sperk* is cited as teaching fiber-reinforced thermoplastic molding compositions including fibers having lengths between 1/8 and two inches. *Sperk* does not cure the deficiencies in the teachings of *Fink* because *Sperk* does not teach or suggest a thermoplastic composite having reinforcing fibers of at least about 0.5 inches and a fiber adhesion promoter.

*Sperk* teaches that fibers having an initial length of 1/8 to two inches in length can be used before shear blending (col. 17, line 66 to col. 18, line 3). *Sperk* also teaches that shear mixing of fibers with polymers typically reduces the size of the fibers to about 0.2 to about 3 millimeters (col. 17, lines 44-49). Thus, *Sperk* does not teach thermoplastic composites or methods of producing composites having reinforcing fibers of at least 0.5 inches because the fibers used in *Sperk* are shear mixed with polymers causing any composite of *Sperk* to have fibers of about 0.2 to about 3 millimeters. *Sperk* does not teach or suggest thermoplastic composites or methods of making thermoplastic composites having reinforcing fibers of at least about 0.5 inches in length in the formed thermoplastic composite.

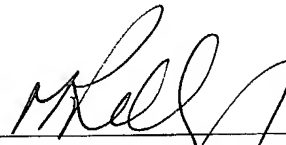
Because the combination of the references does not teach or suggest each element of the pending claims, the combination cannot render the claims obvious. Therefore, Applicant submits the rejection has been overcome.

Dependent claims 2-6, 8-10, 12, and 14-29 incorporate the limitations of the independent claims from which they depend. Applicant submits that the combination of the cited references does not render these dependent claims obvious for at least the reason that the combination does not render their respective independent claims obvious.

# CONCLUSION

In light of the foregoing amendments and for at least the reasons set forth above, Applicant respectfully submits that all rejections have been traversed, rendered moot, and/or accommodated, and that the now pending claims 1-6, 8-12, and 14-31 are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,



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